

ABSTRACT OF THE DISCLOSURE

A self-piercing rivet comprises a flange with a large diameter and a shank with a hollow cavity extending from the flange inward. The rivet is made of aluminum or an aluminum alloy. The shank is a straight cylinder with outer diameter D1, and the hollow cavity in the shank has conical section tapered from the shank end and converging towards the flange at angle α and a straight cylinder section with inner diameter D2 extending from the conical section to the end on the flange side. The shank has a substantially flat ring-shaped end with outer diameter D1 and radial length T1. The angle α of the conical section ranges between 70° and 110°.